Michigan Cancer Consortium

Recommendations for the Early Diagnosis of Cervical Cancer, 2003

In 1996, the Michigan Department of Public Health (now the Michigan Department of Community Health) released a 98-page document entitled *Cervical Cancer Screening & Detection in Michigan: Recommendations to Reduce Mortality*.

The guidelines were the result of several years of research and the collective expertise of professionals from the fields of public health, medicine, nursing, and epidemiology. They were written by members of the Cervical Cancer Advisory Committee, a subcommittee of the Department's Michigan Cancer Consortium (MCC), to guide the practice of health care providers in conducting cervical cancer screening examinations and follow-up of abnormalities.

In December 2000, in recognition of the changed state of science, the MCC (now an independent body comprised of organizational members) reconvened Michigan clinical experts from a variety of disciplines, installing them as members of a new MCC Cervical Cancer Advisory Committee and charging them with revising the 1996 recommendations, based upon the current knowledge and best practice.

In March 2001, the MCC Board of Directors reviewed and approved these updated consensus guidelines, publishing them as *MCC Recommendations for the Early Diagnosis of Cervical Cancer* and disseminating a summary of them in a laminated, tri-fold document to primary care providers throughout Michigan.

In 2002, the MCC again assembled its Cervical Cancer Advisory Committee, this time to address recently released changes in the Bethesda System (a national, uniform framework of pathology classification for reporting the results of Pap tests) and the American Cancer Society guidelines for the initiation of Pap smear screening and the management of abnormal Pap smears.

Committee members met in late 2002 and again in early 2003 to review and revise the MCC recommendations to ensure that they were consistent with the changes at the national level and adhered to the best current clinical evidence and expert opinions. The group submitted its completed revisions to the MCC Board of Directors, which approved them in April 2003. The guidelines have been pilot-tested in several locations and are being disseminated to providers and health care systems throughout the state.

Notes About the 2003 MCC Guidelines

In their revision of the MCC guidelines, members of the MCC Cervical Cancer Advisory Committee strove to meet two goals: 1) to maximize the delivery of cervical cancer screening techniques and 2) to minimize over-treatment of low-grade disease that often resolves spontaneously, while at the same time identifying and treating significant cervical disease.

The 2003 MCC Recommendations for the Early Diagnosis of Cervical Cancer speak to several points of concern expressed by Cervical Cancer Advisory Committee members during the guideline revision process.

The first concern was to ensure the appropriate follow-up of abnormal Pap smears by seeking to minimize, as much as possible, both the over-management and the over-treatment of less serious cervical abnormalities, especially among young women who wish to retain fertility.

A second concern was to ensure, as much as possible, that women who were, for whatever reason, not able to easily access either cervical cancer screening and/or follow-up diagnostic services would not, as a result, be placed at undue risk of developing invasive cervical cancer.

A third concern involved the possibility of promoting liquid-based cytology as the standard of care. Although this technology can potentially be used to screen women less frequently, it is more costly than a conventional Pap test. As such, it currently is much more likely to be available to providers in larger health systems than to providers working in public health and family planning agencies.

Lastly, the Advisory Committee members were concerned about the fact that the test for Human Papillomavirus is becoming more widely available and, therefore, that the appropriate use of this test should lead to more targeted follow-up.

As part of the Advisory Committee's discussions, a cytopathologist member shared this statement from the College of American Pathologists' *Policy on Frequency of Cervical Cancer Screening*, 2003:

"The College of American Pathologists encourages annual pelvic exams and regular cervical cancer screening for all women. Regular cervical cancer screening should begin three years after women become sexually active or by the age of 21. Current data indicate that most women under the age of 30 will benefit from annual cervical cancer screening. Lengthened intervals of cervical cancer screening may be appropriate for some women depending upon specific clinical circumstances.

"Regardless of age, the appropriate screening interval should be determined by each patient in consultation with her physician taking into account detailed patient history and risk factors. A woman's Human Papillomavirus status may be a contributing factor in determining cervical cancer screening frequency. When accuracy or completeness of the historical record is in doubt, annual screening should be the default screening interval."

In light of the Committee's desire to reconcile these issues, the 2003 MCC Recommendations for the Early Diagnosis of Cervical Cancer promote **annual** screening for cervical cancer. The recommendations also encourage providers to develop office-based systems that will notify women of abnormal Pap tests, encourage them to schedule follow-up diagnostic testing, and remind them to schedule a Pap test on a regular basis.

The Michigan Cancer Consortium would like to thank all those involved for their significant contributions of time and effort to ensure that Michigan's guidelines continue to reflect the best of scientific evidence and expert opinions regarding the early detection of cervical cancer.

April 17, 2003

Bibliography

Anttila T, Saikku P, Koskela P, Bloigu A, Dillner J, Ikaheimo I, Jellum E, Lehtinen M, Lenner P, Hakulinen T, Narvanen A, Pukkals E, Thoresen S, Youngman L, Paavonen J. Serotypes of *Chlamydia trachomatis* and risk for development of cervical squamous cell carcinoma. *JAMA* 2001;285:47-51

Ho GYF, Bierman R, Beardsley L, Chang CJ, Burk RD. Natural history of cervicovaginal Papillomavirus infection in young women. *NEJM* 1998;338:423-428

Miller MG, Sung HY, Sawaya GF, Kearney KA, Kinney W, Hiatt RA. Screening interval and risk of invasive squamous cell cervical cancer. *Ob/Gyn* 2003;101:29-37.

Munoz N, Bosch FX, de Sanjose S, Herrero R, Castellsague X, Shah KV, Snijers PJF, Meijer CJLM. Epidemilogic classification of Human Papillomavirus types associated with cervical cancer. *NEMJ* 2003;348:518-527.

Nash JD, Burke TM, Hoskins WJ. Biologic course of cervical Human Papillomavirus infection. *Ob/Gyn* 1987:69:160-162.

Saslow D, Runowicz CD, Solomon D, Moscicki AB, Smith RA, Eyre HJ, Cohen C. American Cancer Society guideline for the early detection of cervical neoplasia and cancer. *CA* 2002;52:342-362.

Shepherd J, Peersman G, Weston R, Napuli I. Cervical cancer and sexual lifestyle: A systematic review of health education interventions targeted at women. *Health Ed Res* 2000;15:681-694.

Soloman D, Davey D, Kurman R, Moriarty A, O'Connor D, Prey M, Raab S, Sherman M, Wilbur D, Wright T, Young N. The Bethesda 2001 System. *JAMA* 2002;287:2114-2119.

Soloman D, Schiffman M, Tarrone R. Comparison of three management strategies for patients with atypical squamous cells of undetermined significance. *JNCI* 2001;93:293-199.

Wright TC, Cox JT, Massad LS, Twiggs LB, Wilkinson EJ. 2001 Consensus guidelines for the management of women with cervical cytological abnormalities. *JAMA* 2002;287:2120-2129.

Michigan Cancer Consortium Cervical Cancer Early Detection Guidelines for Primary Care Providers Spring 2003

Screening Tests

A Pap test and speculum exam should be used for routine cervical cancer screening.

Age to Initiate Screening

Screening for cervical cancer should begin at age 21 or three years after the onset of sexual activity, whichever occurs first.

Screening Frequency

- Women should be encouraged to have annual gynecologic exams and not be discouraged from seeking Pap tests or annual screening unless they have none of the following risk factors:
 - History of sexual intercourse
 - No previous routine Pap smear (never been screened or have not been screened in 5+ years)
 - Women who are infected with high-risk HPV
 - Women with a history of cervical or vaginal dysplasia or cervical, endometrial, vaginal, or vulvar cancer
 - Women who were exposed to DES in utero
 - Women who currently have, or have had, more than one sexual partner
 - Women whose sexual partners have had more than one partner.
 - Women whose sexual partners have had other sexual partners with cervical cancer or with high-risk HPV
 - Women and women whose sexual partners have a history of substance abuse or HIV/AIDS
 - Women who began sexual intercourse at # 15 years of age
 - Women with a history of sexually transmitted diseases, other than HPV
 - Women who are immunosuppressed
 - Smokers and abusers of other substances, including alcohol
- Women without risk factors: After 3 consecutive annual negative Pap tests, the screening interval may be increased to every 2 years.
- Women without a cervix, and without a prior history of gynecologic malignancy, are at low risk of cervical cancer.

Upper Age Limit for Screening

There is no upper age limit at which cervical cancer screening should be discontinued. A woman should be screened as long as she is at risk for HPV exposure/infection. Therefore, age should not be the sole factor in determining when screening is no longer appropriate. Provider discretion should be used with consideration of: 1) whether the woman is sexually active and therefore at risk for HPV exposure; 2) existence of other co-morbid conditions which are likely to decrease life expectancy; and 3) if she is HIV+. Women over age 70 may consider not being screened if they have had three (3) documented negative Pap tests and no abnormal Pap tests in the last 10 years.

Reminder and Tracking Systems

Clinicians should be encouraged to develop a system which will notify women of abnormal Pap tests, ask them to schedule follow-up diagnostic testing, and remind them to schedule a Pap test.

Patient Education

Clinicians should educate all women about the components of the pelvic exam, including whether cervical cancer screening is performed and whether or not the woman is being tested for STDs, including HPV.

SPECULUM EXAM

Findings	Action
Abnormal gross appearance	Immediate referral for colposcopy with biopsy,
	as indicated
Perform Pap test	(Do not rely on cervical cytology results alone)

Indications for Referral to Qualified Healthcare Provider

- Women who are pregnant and have an abnormal Pap test and/or abnormal cervix, including a planned referral for postpartum management
- Women with recurrent or persistent dysplasia who have a desire for fertility
- Pap test results of AGC or AIS
- Women who are immunocompromised with abnormal Pap test \$ASC-US
- HSIL Pap test not confirmed by biopsy or ECC
- ASC-H with negative work-up
- Women whose Pap smear specimen is "unsatisfactory for evaluation due to Atrophy with Inflammation" and in whom the use of estrogen is contraindicated (Page B-4)
- Pap test result of "LSIL for low-risk, postmenopausal women with a history of negative Pap tests" and in whom the use of estrogen is contraindicated (Page B-5)
- It is recommended that women with any gynecologic cancer should be referred to a GYN oncologist

HPV Management

Perform HPV (high-risk)	If results of high risk HPV
testing 1 year after colposcopy	test +, repeat colposcopy

Pap Testing on Women Who Have Had Complete Hysterectomies

- Perform yearly speculum and bimanual exam
- There is no indication for Pap testing in most instances
- History of CIN/CIS where this was the reason for hysterectomy, DES exposure *in utero*, or immunocompromised status: Continue vaginal sampling
- Woman with a history of abnormal cervical biopsies (CIN2/CIN3): Pap test of vagina until 3 negative tests are achieved within 10 years, then Pap testing may be discontinued
- Women with a cervix (supra-cervical hysterectomy) should continue Pap tests based on screening guidelines

Glossarv

HPV: Human Papillomavirus

ASC-US: Atypical Squamous Cells—Uncertain Significance

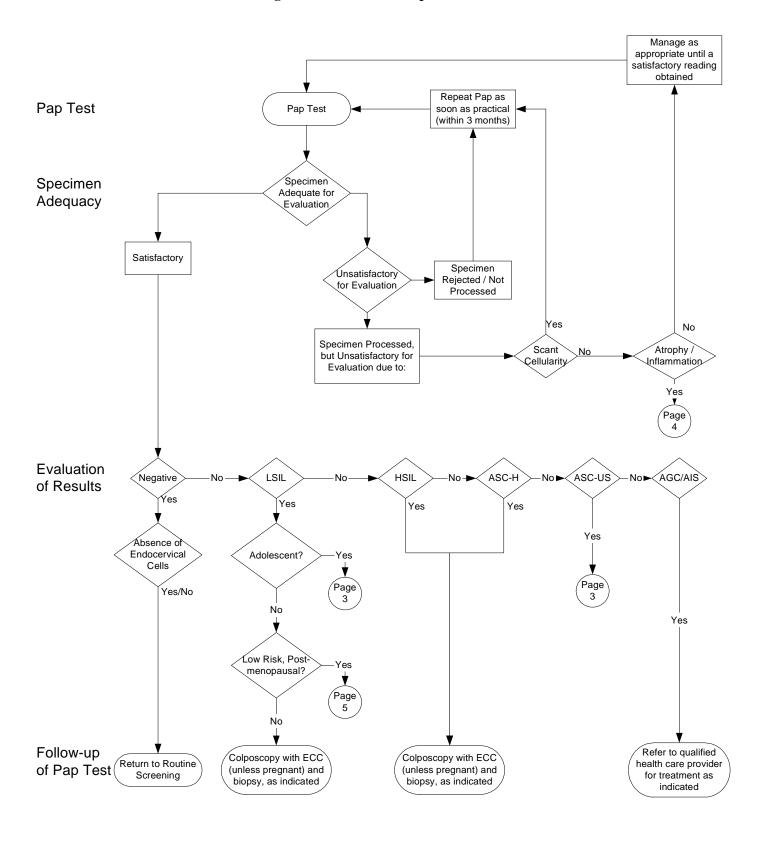
ASC-H: Atypical Squamous Cells—Cannot Exclude High-grade Lesion **LSIL:** Low-grade Squamous Intraepithelial Lesion (mild dysplasia)

HSIL: High-grade Squamous Intraepithelial Lesion (moderate/severe dysplasia)

AGC: Atypical Glandular Cells **AIS:** Adenocarcinoma *in Situ* **ECC:** Endocervical curettage

CIN: Cervical Intraepithelial Neoplasia **HIV:** Human Immunodeficiency Virus

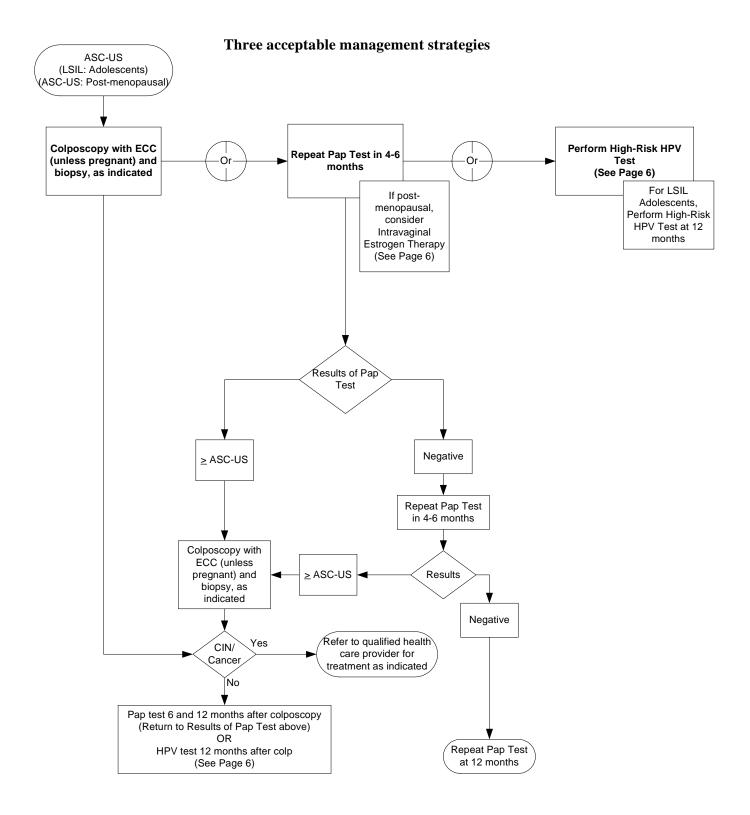
Management Overview of Pap Test Results



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PAP TEST RESULTS

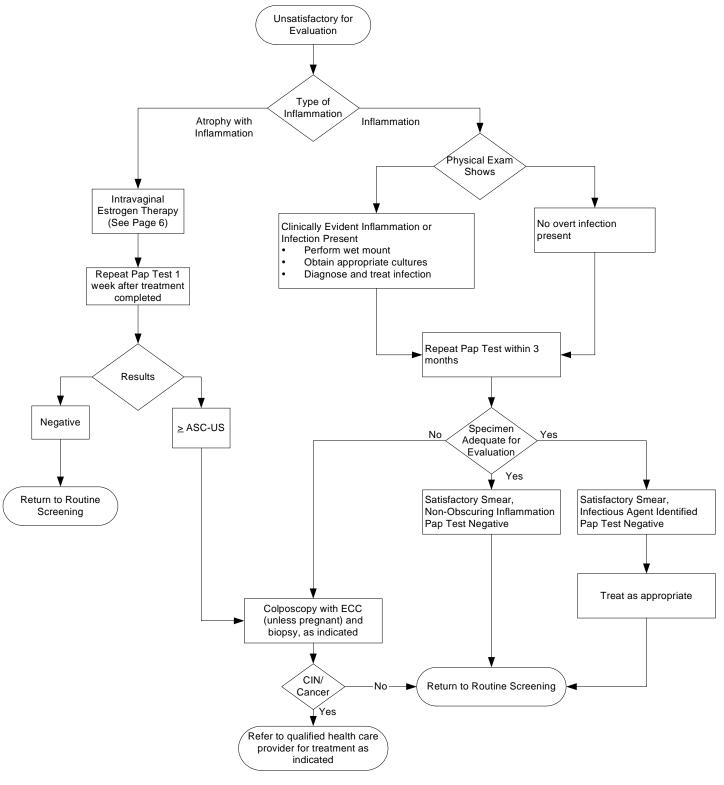
ASC-US (Atypical Squamous Cells-Uncertain Significance) or LSIL (Special Circumstance: Adolescents)



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PAP TEST RESULTS

UNSATISFACTORY for Evaluation, due to INFLAMMATION* (Causes: infection, atrophy/estrogen deficiency)

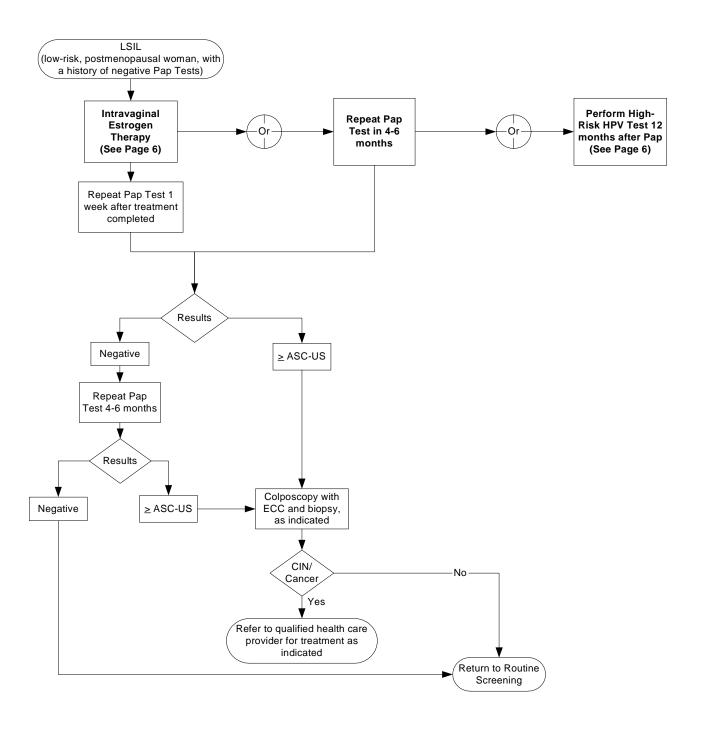


^{*}inflammation is not indicative of a potential cancer per se, but inflammation may obscure the result

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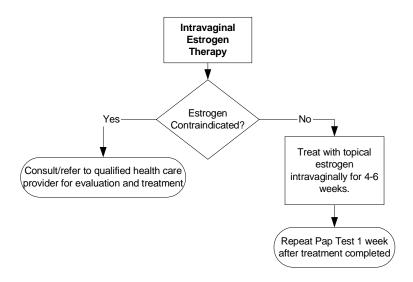
PAP TEST RESULTS LSIL

(Special Circumstance: low-risk, postmenopausal women, with a history of negative Pap Tests)

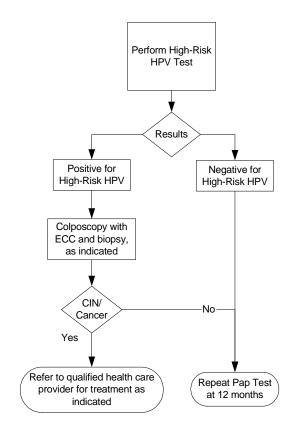


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Intravaginal Estrogen Therapy, for postmenopausal women



High Risk HPV Testing



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